the snail here also occurs on floating vegetation the similarity would be very striking.

This colony near Tucker's, Long Beach Island, Ocean County New Jersey extends the range of *Paludestrina salsa* southward, to the best of my knowledge, from Branford, Connecticut, which is near New Haven—an extension of considerably over a hundred miles.

My material, critically examined by Mr. E. G. Vanatta, is deposited at the Academy of Natural Science of Philadelphia.

## PLEISTOCENE MOLLUSKS FROM ILLINOIS.

## BY FRANK C. BAKER.

Early in the year the Page Engineering Company of Chicago submitted to the writer some specimens of mollusks and moss obtained from a cutting near the Fox River, one mile east of Cary Station. The sequence of deposits is as follows :

1.	Black	eart	h			2	feet	6	inches
2.	Brown	ear	th			2	66	<b>6</b>	inches
3.	Marl.					4	66		
4.	Moss					<b>2</b>	66		
5.	Marl.					2	66		
	Height	ef s	sect	ion		13	6.6		

Eight species of mollusks were picked from the marl, No. 3. Valvata tricarinata Say.

Valvata lewisii Currier. Amnicola lustrica Pilsbry. Amnicola limosa Say. Planorbis parvus Say. Planorbis exacutus Say. Galba galbana Say. Physa species (fragments).

The moss was submitted to Doctor Edward W. Berry, Johns Hopkins University, who determined it to be "*Plagiothecium denticulatum* (Linné) B. and S., probably near the subspecies *rosaceum* (Hampe) B. and S." Occurring as this thick moss bed does between two strata of marl, it arouses considerable interest as to the method of its formation and also that of the bed of marl above and below the moss. Professor Berry says of this species "this moss is very common and wide-spread in middle latitudes and may possibly be a composite form. It grows in various moist (not necessarily swamp) situations from the Atlantic to the Pacific."

The deposits are all post-glacial and probably represent fluctuations in a water body, possibly connected with the Fox River Valley. The thickness of the moss (two feet) suggests a comparatively long period of swampy condition between two pond formations. The mollusks are indicative of a water body four to eight feet in depth. Samples were not secured of the marl beneath the moss, which probably also contained mollusks.

The whole Fox River Valley is worthy of study, the lower part of the river bank bearing strata belonging to the Sangamon or Post-Illinoian interglacial interval, which are fossil-bearing. In view of the rich beds of molluscan fossils found near Chicago, it would seem that these Fox River strata should be investigated, as they may also contain remains of life indicating something of the migration of life during this interesting interval, when the great shell beds of Toronto were formed.

The New York State College of Forestry. Syracuse University.

## THE GASTROPODA OF PAYNE COUNTY, OKLAHOMA.

BY DARLING K. GREGER, COLUMBIA, MISSOURI.

The collection upon which the list of species given below is based was made in the month of May, during a season of abnormally wet weather. While we covered practically the whole of Payne county, the region between Wild Horse and Stillwater creeks and from the Cimarron River north to the town of Stillwater was studied quite thoroughly during the period of our stay.

Of the nine families represented in the region, the Helicide